CLAIMS

1. An arrangement for generating electric power, which arrangement comprises several biocatalytic fuel cell units for the generation of electric power, wherein the arrangement also comprises

one or more intermediate storages for balancing and storing the voltage generated by the biocatalytic fuel cell units, and

means for connecting the voltage generated by the biocatalytic fuel cell units cyclically to the one or more intermediate storages.

2. An arrangement as claimed in claim 1, wherein the means for connecting the fuel cell units comprise switch means and a control circuit arranged to control them.

3. An arrangement as claimed in claim 1, wherein the arrangement also comprises a voltage converter that is arranged to convert the voltage stored in the intermediate storage and to provide output voltage.

4. An arrangement as claimed in claim 3, wherein the voltage converter is a DC/DC converter.

5. An arrangement as claimed in any one of claims 2 to 4, wherein the switch means are semiconductor switches.

6. An arrangement as claimed in any one of claims 1 to 5, wherein the intermediate storages are capacitors or accumulators.

7. A method for generating electric power, in which method electric power is generated with biocatalytic fuel cell units, wherein the fuel cell units are connected through a controllable switch to one or more intermediate storages, and the method comprises a step for

controlling the controllable switches cyclically to and from conducting state to increase the output voltage of the fuel cell units.

8. A method as claimed in claim 7, wherein the method also comprises a step for defining one or more properties of the cells, and

controlling on the basis of the definition the controllable switch of a cell having a specific property to conducting state.

9. A method as claimed in claim 8, wherein the property to be defined is the voltage of the cell.

10. A method as claimed in claim 8, wherein the method also comprises a step for continuously defining the voltages of the cell,

for controlling on the basis of the definition, the controllable switch of a specific cell to conducting state, and

for keeping the switch in conducting state until the voltage of the specific cell decreases below a predefined limit value.

11. A method as claimed in any one of claims 7 to 10, wherein the method also comprises a step for converting the voltage stored in the intermediate storage with a voltage converter to provide output voltage.

12. A method as claimed in any one of claims 7 to 11, wherein the intermediate storages are capacitors or accumulators.

13. A power source that comprises several biocatalytic fuel cell units for generating electric power, wherein the fuel cell units comprise electrodes with the output voltage of a fuel cell unit between them, wherein the power source also comprises

an intermediate storage for balancing and storing the voltage generated by the biocatalytic fuel cell units,

first semiconductor switches connected to one electrode of each biocatalytic fuel cell unit for connecting the output voltages of the units cyclically to the intermediate storage,

a control circuit for controlling the first semiconductor switches, and

a voltage converter that comprises an input connected to the poles of the intermediate storage, and an output that is arranged to provide output voltage.

14. A power source as claimed in claim 13, wherein the intermediate storages are capacitors or accumulators.

15. A power source that comprises several biocatalytic fuel cell units for generating electric power, wherein the fuel cell units comprise electrodes with the output voltage of a fuel cell unit between them, wherein the power source also comprises

a balancing intermediate storage for balancing and storing the voltage generated by the biocatalytic fuel cell units,

fuel-cell-unit-specific intermediate storages and first semiconductor switches, the first semiconductor switches being arranged to connect the fuel-cell-unit-specific intermediate storages cyclically in parallel with the fuel cells,

second semiconductor switches arranged to connect the fuel-cell-unit-specific intermediate storages in series,

a third semiconductor switch arranged to connect the series-connected intermediate storages in parallel with the balancing intermediate storage,

a control circuit for controlling the semiconductor switches, and

a voltage converter that comprises an input connected to the poles of the balancing intermediate storage, and an output that is arranged to provide output voltage.

16. A power source as claimed in claim 15, wherein the intermediate storages are capacitors or accumulators.